POLISH ANNUAL REPORT ON THE COLLECTION OF FISHERIES DATA FOR 2014

by

NATIONAL MARINE FISHERIES RESEARCH INSTITUTE

GDYNIA, POLAND

DEPARTMENT OF FISHERIES

MINISTRY OF AGRICULTURE AND RURAL DEVELOPMENT

WARSAW, POLAND

GDYNIA, 31ST MAY 2015

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I. General framework

Polish Annual Report covers fisheries, biological, and economical sampling activities in 2014, collected within the Polish National Programme for the Collection of Fisheries Data for 2014-2016. Report was prepared in accordance with the Commission guidelines*: Guidance for the submission of Annual Reports on the National Data Collection Programmes under Council Regulation (EC) 199/2008, Commission Regulation (EC) 665/2008, and Commission Decision 2010/93/EU, Version 2 (26.02.2015)*. Polish Annual Report on fisheries data collection 2014 was prepared within the framework of the National Program for 2014 approved by the Commission Implementing Decision C(2013) 5568 of 30.08.2013 and in agreement with Council Regulations (EC) 199/2008, 665/2008, and Commission Decision 2010/93/EU and there were no methodological changes in approach compared to the year(s) before.

List of derogations is provided in standard table I.A.1
List of bilateral and multilateral agreements regarding data collection that are currently valid is provided in standard table I.A.2.

II. National data collection organization

II.A National correspondent and participating institutes

National correspondent

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Participating institutions

National Marine Fisheries Research Institute

National Marine Fisheries Research Institute (NMFRI), formerly the Sea Fisheries Institute in Gdynia (SFI), is a sole executor of Data Collection Program.
The NMFRI was established in 1921 to conduct research in marine biology. Areas of research at the NMFRI include fisheries biology, fisheries oceanography and marine ecology, fish processing technology, and fisheries economics.
The National Marine Fisheries Research Institute is supervised by the Minister of Agriculture and Rural Development.

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Polish National Programme, executed solely by the National Marine Fisheries Research Institute in Gdynia is financed through the contract with the Minister of Agriculture and Rural Development.

In accordance with article 8(2) of the Commission Regulation 665/2008, the national DCF website was established - http://dcr.mir.gdynia.pl/ , serving as an information deposit for information related to the data collection framework (DCF). This website is currently under reconstruction process.

In 2014 two *ad hoc* national coordination meetings were held between the representatives the of the Ministry of Agriculture and Rural Development and NMFRI. The meetings took place in March and July in Warsaw at the premises of the Ministry. The main issues discussed were:

- the funding of the National Programme and the delay in conclusion of the annual agreement between NMFRI and the Minister of Agriculture and Rural Development on the execution of NP 2014, which was finally signed in November 2014;
- a formal agreement between the Ministry of Agriculture and Rural Development and NMFRI regarding the NMFRI's access to VMS and fishing logbooks data, which was finally signed in September 2014.

II.B Regional and International coordination

II.B.1 Attendance of International meetings

The full list of international co-ordination meetings Poland attended in 2014 is provided in standard table II.B.1.

II.B.2 Follow-up of regional and international recommendations

A list of recommendations relevant to 2014 is given in standard table II.B.2.

III. Module of the evaluation of the fishing sector

III. A General description of the fishing sector

In 2013, the Polish fishing fleet consisted of 798 registered vessels, including 43 inactive vessels, with a combined gross tonnage of 33 thousand GT, a total engine power of 82 thousand kW and an average age of 29 years. The number of vessels, capacity and engine power remained stable between 2013 and 2012 . According to preliminary figures in 2014 number of vessels has increased by 5% with capacity and engine power within the national level.

The Polish fleet spent a total of around 67 thousand days at sea in 2012. The total number of days at sea in 2013 amounted to 71 thousand days, 6% higher than in 2012. The upward trend was continued in 2014 (74 thousand days) The increase can be explained by a greater effort deployed by demersal fleet targeting mostly *Gadus morhua* and flatfish but that has reallocated their effort towards pelagic species (*Sprattus sprattus* and *Clupea harengus*) attracted by prices increase.

The total amount of income generated by the Polish Baltic fleet in 2013 was €56.7 million (excluding subsidies). This consisted of €56.6 million in landings value (€55.8 million in 2012) and €0.1 million in non-fishing income. The Polish Baltic fleet's landings income increased 1% between 2012 and 2013. The historically highest outcome of the Polish fleet in 2013 was caused by a high pelagic fish prices and landings. In 2014 Baltic Sea landings amounted to 118 thousand tonnes worth €47 million.

The total weight of seafood landed by the Polish fleet in 2014 was 170 thousand tonnes (-13% compared to 2013). The total amount of Baltic Sea fleet landings was 118 thousand tonnes (133 thousand tonnes in 2013), with a landed value of €47.5 million. The total landings weight and value of the Baltic Sea fleet decreased by 11% and 16% respectively between 2014 and 2013. The reason behind that deterioration was TAC cut for *Sprattus sprattus* (-11%) and poor physical condition of *Gadus morhua* in the Baltic influencing negatively prices obtained by fishermen for that fish.

In 2014 *Sprattus sprattus* generated the highest landed value in the Baltic fisheries (€14.5 million), followed by *Gadus morhua* (€13 million), *Clupea harengus* (€10 million), and *Platichthys flesus* (€4 million). In terms of landings weight, in 2014 *Sprattus sprattus* landings were 58.4 thousand tonnes (80.3 thousand tonnes in 2013), *Gadus morhua* 11.9 thousand tonnes (12.6 thousand tonnes in 2013) and *Clupea harengus* 28.3 thousand tonnes (23.6 thousand tonnes in 2013). The major factor causing the changes in landings weight and value in 2014 compared to 2013 was decreased TAC for *Sprattus sprattus* and *Gadus morhua* and increased for *Clupea harengus* as well as lower prices for all these species.

The amount of landings by the distant-water fleet1 totaled 52 thousand tonnes in 2014 (61.4 thousand tonnes in 2013) out of which 45.3 thousand tonnes were caught in OFR (Other Fishing Region) the remaining one (6.8 thousand tonnes) in NEAFC and NAFO areas. In 2014 similarly to 2013 , *Trachurus trachurus* generated the highest landed weight (34.9 thousand tonnes), followed by *Gadus morhua* (6.3 thousand tonnes), *Scomber scombrus* (5.7 thousand tonnes) and *Sardinella aurita* (2.7 thousand tonnes).

III. B Economic variables

Baltic Sea, North Sea, Eastern Arctic, North Atlantic (Supra region)

III.B.1 Achievements: results and deviation from NP proposal

Fisheries economic data has been produced using two main sources of primary information: administrative documents (fishing logbooks, landing declarations, first sale documents) and statistical questionnaires filled out by fishing vessel owners.

Followed previous years, due to confidentiality reasons deep sea trawlers segment (distant-water fleet) were excluded from economic analysis (data were collected but could not be reported). In 2013 this segment consisted of 3 very characteristic vessel (2 operating in other fishing region, 1 fishing in North Atlantic), what makes impossible to report data without identifying them and infringe the law on data confidence nor combine them with other vessel's segments.

Methods used for collecting data adhere to these planned in the NP proposal

[1] Vessels over 40 meters length operating in OFR or Area 27 (except for Baltic Sea)

Economic Clustering of fleet segments

The final economic clustering is slightly different from NP proposal. All the segments, except *passive gears 10-12 m* was clustered. To the segment *drift and fixed netters 12-18 m* (initially clustered with *drift and fixed netters 18-24 m*), was added one *vessel using active and passive gears 12-18 m*, which used mostly passive gears, one *vessel using hooks 10-12 m* and 4 *vessels using hooks 12-18 m*. To the segment *demersal trawlers and seiners 12-18 m* (initially clustered with *demersal trawlers and seiners 18-24 m*) was added 2 *pelagic trawlers 12-18 m*. A new cluster *demersal trawlers and seiners 18-24 m* appeared consisting of *demersal trawlers and seiners 18-24 m* and *demersal trawlers and seiners 24-40 m*. Cluster *pelagic trawlers 24-40 m* was divided into two separate clusters: *pelagic trawlers 18-24 m (pelagic trawlers 18-24 m* and *vessels using active and passive gears 12-18 m*, which used mostly active gears*)* and *pelagic trawlers 24-40 m* (*pelagic trawlers 24-40 m* and one vessel *pelagic trawlers over 40 m*, which, after rebuilding, slightly exceeded 40 m). Cluster *passive gears 0-10 m* remained unchanged as proposed in NP.

Table 1. III B 1 Share of catches volume of clustered segments, 2013.

Segments - clustered	Segments - before clustering	%	type of segment
PG VL0010	VL0010 DTS	1%	N
	VL0010 PG	99%	I
PG VL0010 - total		**100%**	
DFN VL1218	VL1218 DFN	84%	I
	VL1012 HOK	1%	N
	VL1218 HOK	3%	N
	VL1218 PMP	12%	S
DFN VL1218 - total		**100%**	
DTS VL1218	VL1012 DTS	10%	S
	VL1218 DTS	87%	I
	VL1218 TM	3%	N
DTS VL1218 - total		**100%**	
DTS VL1824	VL1824 DTS	92%	I
	VL2440 DTS	8%	S
DTS VL1824 - total		**100%**	
TM VL1824	VL1824 TM	95%	I
	VL1824 PMP	5%	N
TM VL1824 - total		**100%**	
TM VL2440	VL2440 TM	95%	I
	VL40XX TM	5%	S
TM VL2440 - total		**100%**	

S- segments similar to other segments; N – Non-important segments with distinct characteristics; I- Important segment with distinct characteristic

Passive gears 0-10m (VL0010 PG)

One vessel mostly using bottom trawl was merged with *passive gear 0-10 m* vessels segment consisting of 455 units. This vessel accounted for only 0,6% of the total catches of the whole cluster

(2013) and targeted similar species to other boats below 10 m length (*Clupea harengus* - 30%, flatfish - 20%, *Gadus morhua* – 14%).

Drift and fixed netters 12-< 18 m (DFN VL1218)

The clustered *segment drift and fixed netters 12-< 18 m* consist of 34 vessels with dominance of drift and fixed netters (29 vessels). Vessels clustered in this segment targeted *Gadus morhua* (67%) and flatfishes (19%). Clustered vessels, which belonged to the segments *Vessels using hooks 12-18m, Vessels using hooks 10-12m* and *Vessels using active and passive gears 12-18 m* targeted mostly *Gadus morhua* and flatfish. Due to the confidentiality reasons (only one vessel in each segment) composition catches data of *VL 10-12 HOK* and *VL 12-18 PMP* are not presented in Figure 1.

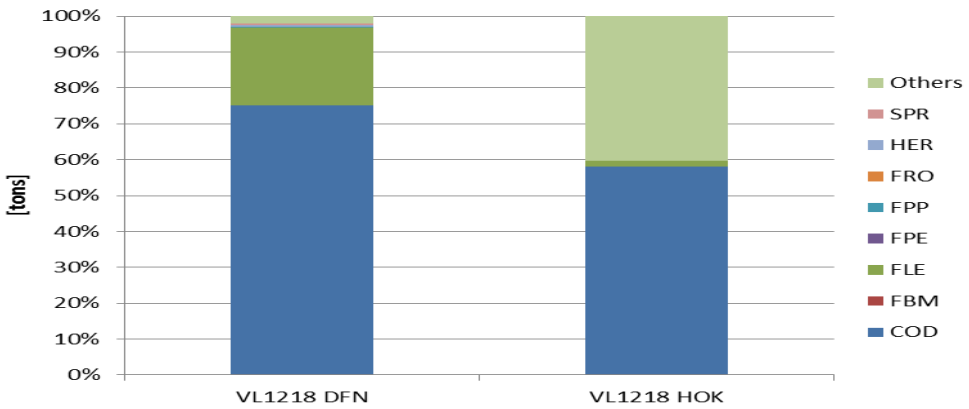


Figure 1. III B1 Drift and fixed netters 12-< 18 m – composition of catches of clustered vessels (*VL 10-12 HOK* and *VL 12-18 PMP* excluded)

Demersal trawlers and seiners 12-< 18 m (VL1218 DTS)

The clustered segment consisted of 73 vessels. *Demersal trawlers and seiners 12-< 18 m* segment had dominant role (87% of total cluster catches). The species composition of catches of other segments in this cluster was different form the dominant segment however the other segments are characterized by similar technical parameters (same length classes). Vessels from this clustered segment targeted mostly flatfish 37%, *Gadus morhua* 27% and *Sprattus sprattus* 17%.

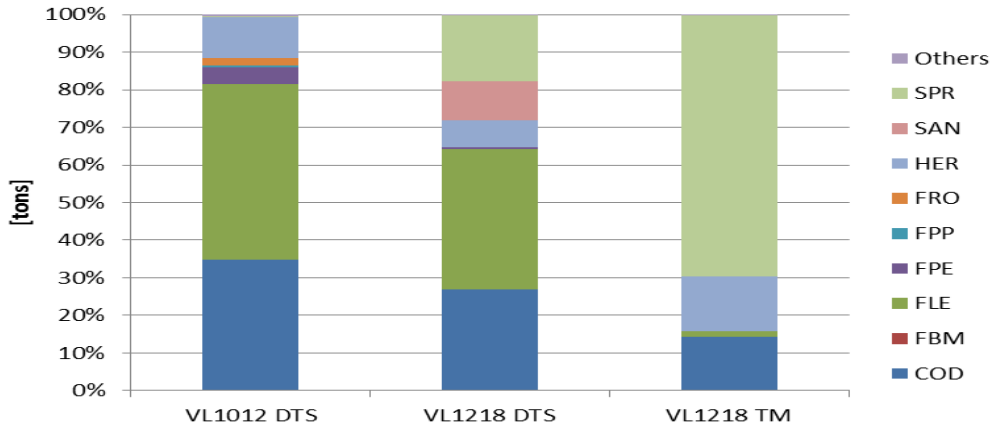


Figure 2. III B1 Demersal trawlers 12-< 18 m – composition of catches of clustered vessels

Demersal trawlers and seiners 18-< 24 m (VL1218 DTS)

32 vessels belonged to this cluster in 2013 out of which 28 were *Demersal trawlers 18-< 24 m* and 5 *Demersal trawlers 24-< 40 m*. 53% of cluster catches was *Sprattus sprattus* , 25% - *Gadus morhua* and 14% flatfishes. Vessels of 18-24 meters length were targeted demersal species but have been involved in pelagic species catches (due to increased profitability) as well.

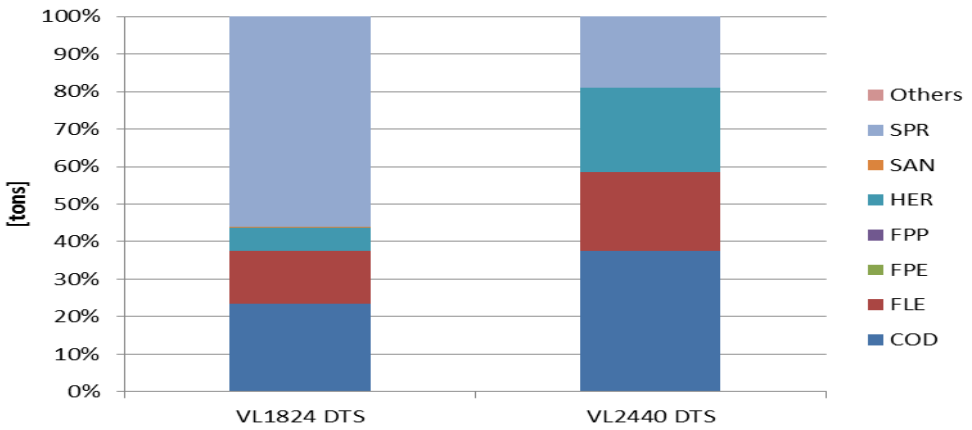


Figure 3. III B1 Demersal trawlers 18-< 24 m – composition of catches of clustered vessels

Pelagic trawlers 24-40 m (VL2440 TM)

The clustered segment consists of 42 vessels belonging to three segments: *Pelagic trawlers 24-< 40 m* (41 vessels) and *Pelagic trawlers over 40 m* (1 vessel, which used to be part of the segment 24-40, but after rebuilding exceeded 40 m. Almost 99% of catches in this cluster were pelagic species – *Sprattus sprattus* and *Clupea harengus*.

Estimation of capital value and capital costs

In order to ensure consistency with data provided for previous years, taking into consideration a specific situation of Polish fisheries (subject of severe capacity reduction program), premiums paid by government for scrapped vessels were taken into account when calculating invested capital. Council Regulation 2792/1999 method of calculation of premium rates was used to determine scrapping value of the vessels. Following the regulation method, capital value of vessels from 16 to 29 years old was depreciated by 1,5 % annually and value of vessels of 30 years old or more decreased by 22,5 %. It is believed that this approach of capital value calculation reflects better value of capital invested in the sector compared to other indicators based on insurance value, book value or replacement value (as well as information collected from questionnaires) which are usually even several times lower than the scraping premiums.

Values used for estimation of capital invested in Polish fleet (according to CR 2792/99)

TABLE 1

Category of vessel by tonnage (GT)	EUR
0 < 10	11 000/GT + 2 000
10 < 25	5 000/GT + 62 000
25 < 100	4 200/GT + 82 000
100 < 300	2 700/GT + 232 000
300 < 500	2 200/GT + 382 000
500 and above	1 200/GT + 882 000

Since 50% of the fleet capacity has been already withdrawn with public assistance, it is considered that financial compensation has significant influence on capital value (market value of second hand vessels). This as well has influenced depreciation which is considered to be better reported through questionnaires.

Because of scarce of information about costs of construction of new vessels in Poland we failed to applied a PIM methodology, due to a very low number of vessels that has been constructed recently.

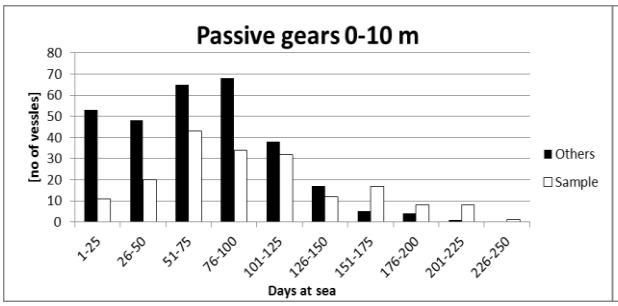
III.B.2 Data quality: results and deviation from NP proposal

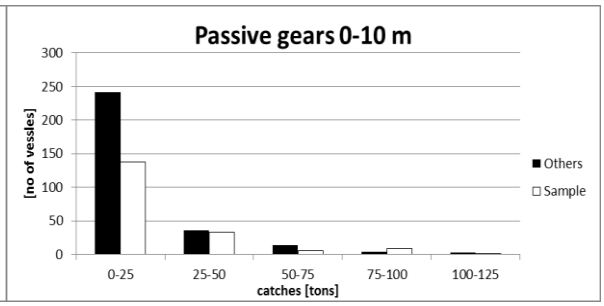
No deviation compared to NP proposal took place.

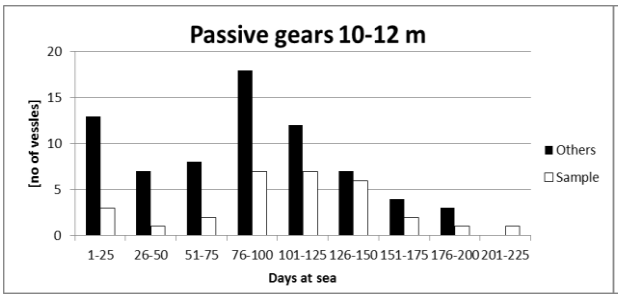
In accordance with national regulations, each vessel's owner is legally bound to fill out a questionnaire regarding the economic results of the fishing vessel. In order to ensure the maximum number of questionnaires is received, similarly to previous years reminders of the obligation to file them were sent by ordinary and registered mail and phone calls were made to execute the obligation. Recommendation of the Lisbon DCF workshop on "statistical issues related to the collection of economic data within the DCF" (i.e. closer cooperation with PO) were taken into account to deal with the non-response problem. As the number of returned questionnaires did not reach a plan of respond rate, calculations were made based on the questionnaires received. Economic data received does not usually exceed 70% of respond rate. However all responses were of random character (probability sample), which should ensure the representativeness of the sample. Response rates are provided in an Excel table.

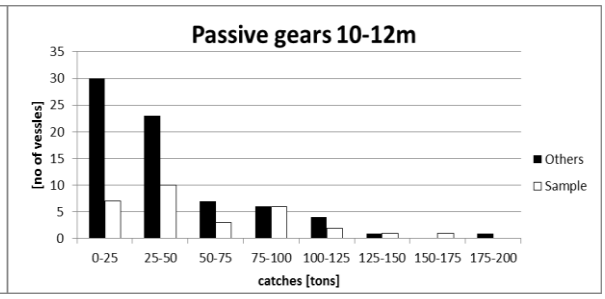
Representativeness

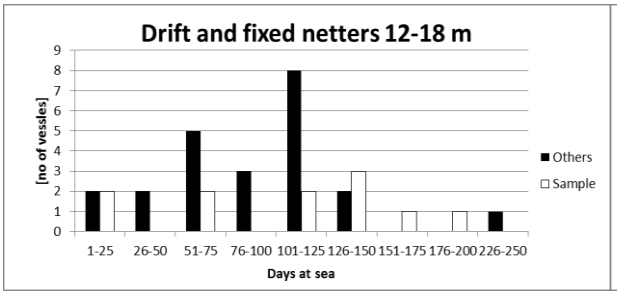
There is no standard approach implemented on how the representativeness of the data can be evaluated. An analysis of the frequency distribution of two variables: volume of catches and effort (days at sea) was performed to check similarity between the sample and the total population. The results presented on graphs below show that there is a little difference between sampled group of vessels and the total population. Species composition of catches by segment confirms as well a good similarity.

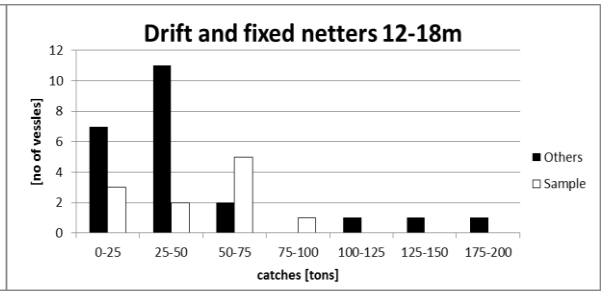


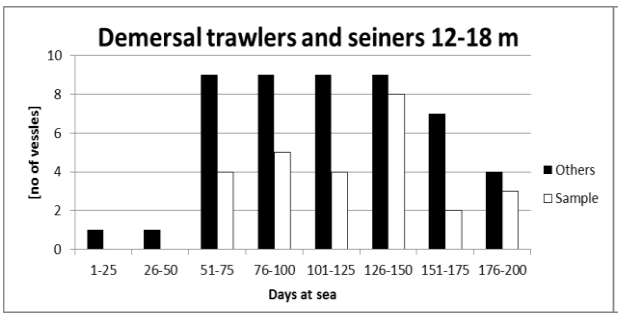


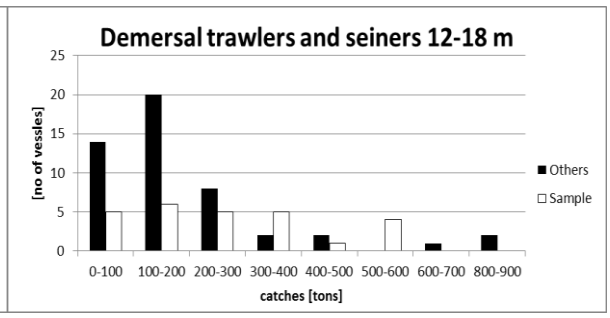


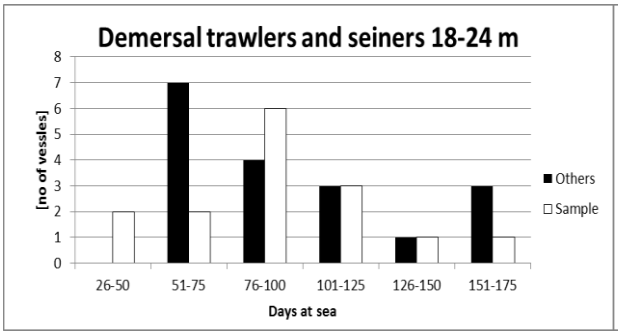


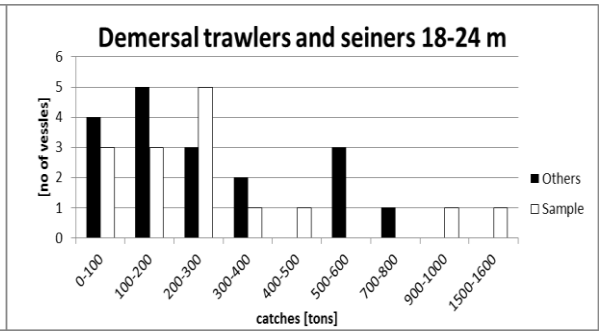


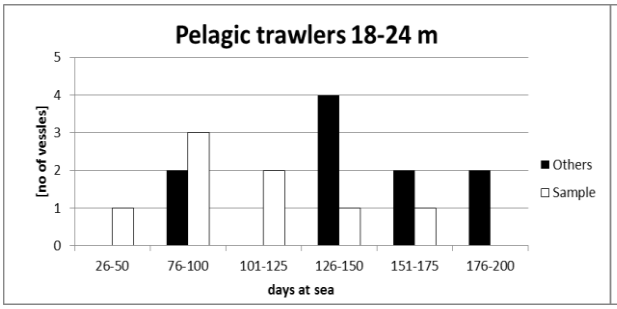


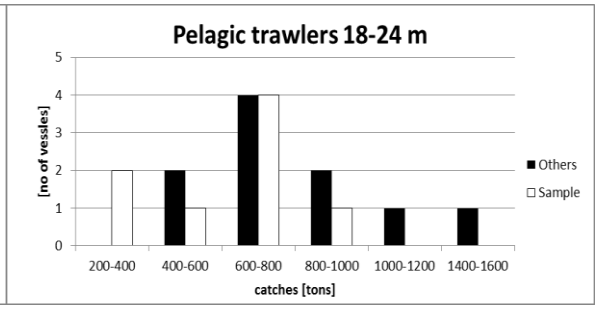


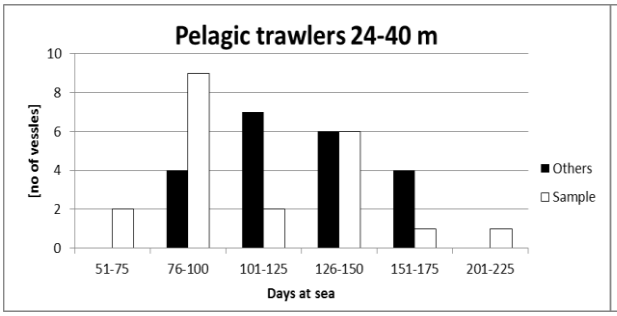


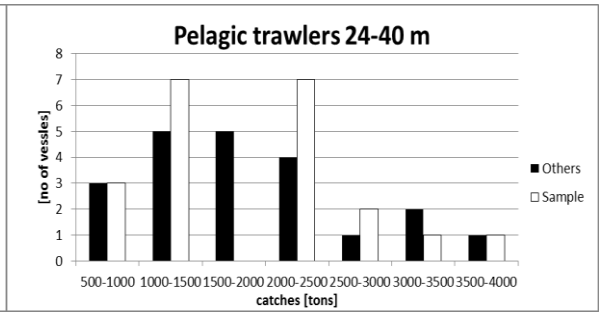




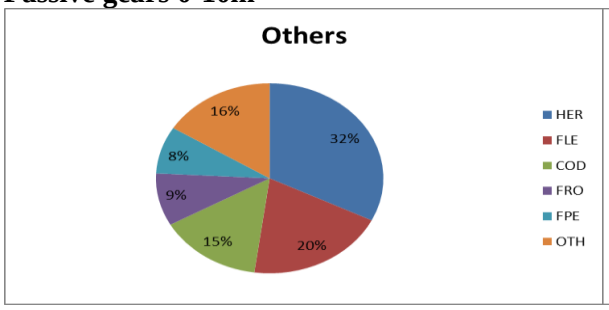


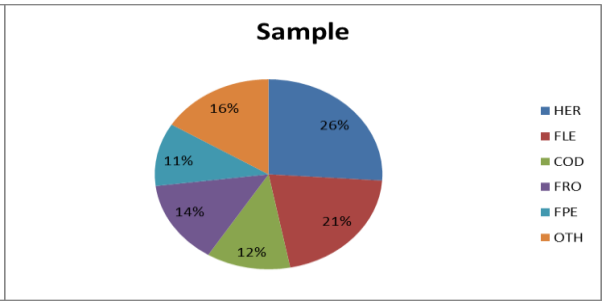




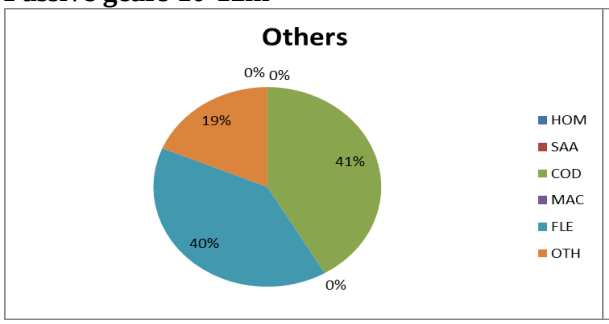


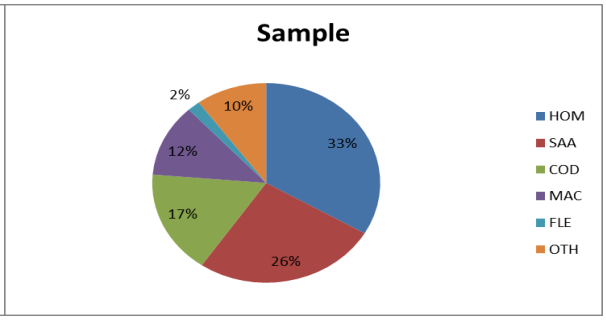
Passive gears 0-10m



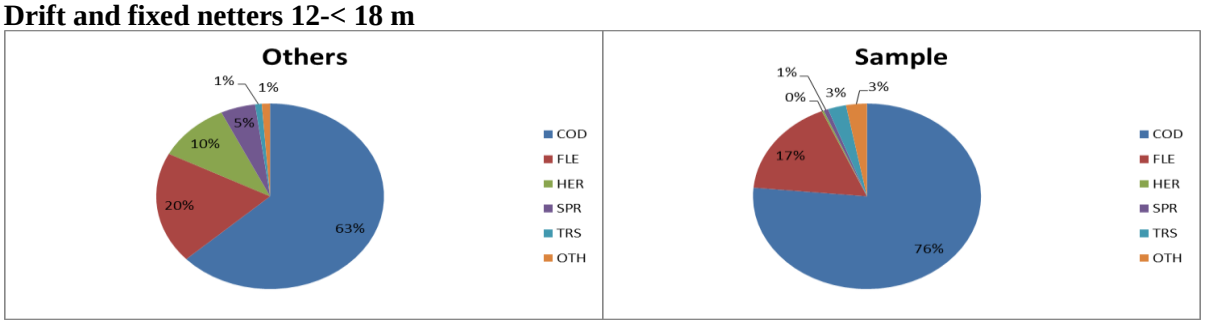


Passive gears 10-12m



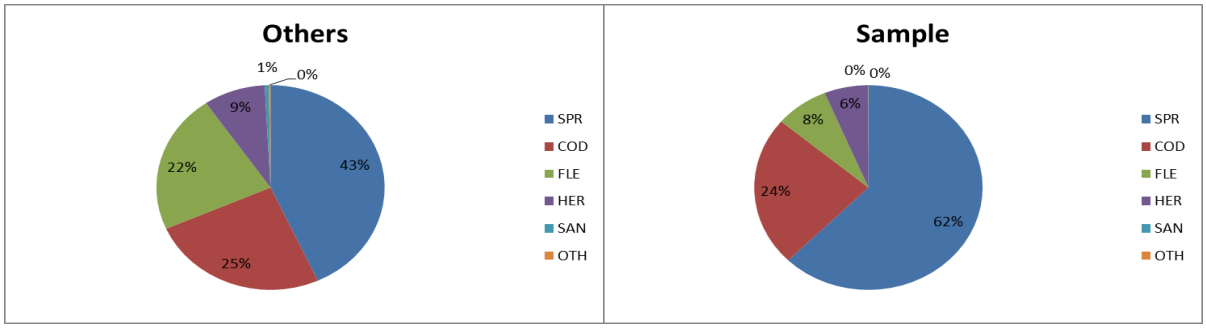


Drift and fixed netters 12-< 18 m

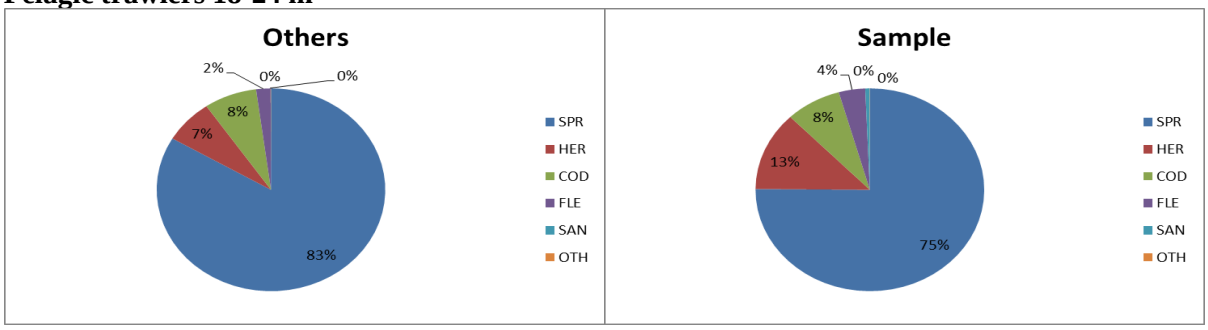


Demersal trawlers and seiners 12-< 18 m

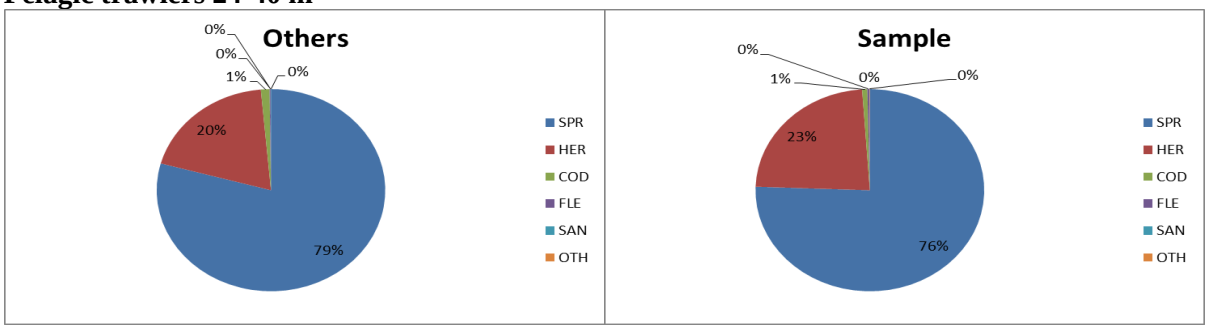
Demersal trawlers and seiners 18-< 24 m



Pelagic trawlers 18-24 m



Pelagic trawlers 24-40 m



III.B.3 Follow-up of Regional and international recommendations

There were no relevant RCM/Liaison Meeting/STECF recommendations.

III.B.4 Actions to avoid shortfalls

No major shortfalls were observed.

III.B Other regions

III.B.1 Achievements: results and deviation from NP proposal

Following information provided in previous years, due to confidentiality reasons deep sea trawlers segment, fishing in area 34 (CECAF), were excluded from economic analysis. Complete data were collected but cannot be reported. In 2014 this segment consisted of 2 very characteristic vessels only, what makes impossible to report data without identifying them and infringe the law on data confidence.

III.B.2 Data quality: results and deviation from NP proposal

No deviation compared to NP proposal took place.

III.B.3 Follow-up of Regional and international recommendations

Not applicable

III.B.4 Actions to avoid shortfalls

Not applicable

III.C Metier-related variables

In 2014 the "Metier Based" sampling strategy was applied. For information on the number of sampled trips and numbers of length sampling, collected during the sampling year, refer to Tables III.C.3 to III.C.6.

The NP 2014 was approved by the Commission Implementing Decision of 30.8.2013 *extending the national programmes for the collection of primary biological, technical, environmental and socio-economic data in the fisheries sector for the period 2011-2013 to the period 2014-2016 [C(2013) 5568 final]*. In order to enable a smooth transition to the new framework for data collection and a continuity in the collection of these data, Commission adopted Polish National Programme 2014-2016 on the basis of the contents of the Polish National Programme 2011-2013, in the version most recently approved by the Commission – which was the version of NP 2012. Consequently, in order to avoid substantial changes to NP and to secure continuity, the reference period applied in case of both the National Programme 2014-2016 and Annual Report 2014 is the same as the one applied in the National Programme 2012. The information used for ranking the metiers were obtained from logbooks (for fishing vessels over 8 m in length), monthly catch reports (for fishing boats below 8 m in length) and from the sales notes.

III.C Baltic Sea

III.C.1 Achievements: results and deviation from NP proposal

Sampling of fishing trips:
FPO_FWS_>0_0_0 and GNS_FWS_>0_0_0 métiers in SD 22 – 24 and SD 25-32 were sampled concurrently according to plan (seven trips planned and sampled for each métier in those two areas).

Nine trips for GNS_ANA_>157_0_0 métier targeting *Salmo trutta* in SD 25-32 were planned to sample on shore. However, sampling of this métier was arranged through self-sampling, based on agreements with fishermen. Such sampling approach was applied due to the fact that *Salmo trutta* fishery is characterized by a great number of commercial fishing trips conducted by small boats (not capable of carrying observers for safety reasons), usually with low individual catch. Therefore, the self-sampling approach proved to be the most efficient way to collect the required data. As the result of such an approach, in total data from 38 trips of this métier were collected within the planned budget.

Seven trips of LLD_ANA_0_0_0 métier were sampled at sea, as compared to eight trips planned. This shortfall in at sea sampling was due to unpredictability of salmon fleet activity in the late autumn and winter. Also, only few vessels can take observers onboard, as most of the longliners are less than 17 m. This shortfall was compensated by sampling one trip on shore, thus in total, eight trips were sampled as planned.

Demersal métiers (OTB_DEF, GNS_DEF, LLS_DEF) selected by the ranking system for sampling separately in SD 22-24 and 25-32 were, in general, sampled in SD 25-32 according to plan but under-sampled in SD 22-24 in two out of three cases (sampling plan in that SD was achieved only for GNS_DEF in the fishery targeting *Gadus morhua*). These demersal métiers are targeting *Gadus morhua* and flatfishes (mainly *Platichthys flesus*). The main reasons for not achieving the planned number of trips sampled for SD 22-24 (similarly to years 2011-2013), were low level of the *Gadus*

morhua TAC utilization in 2014 (72%) and significantly reduced total number of commercial fishing trips as compared to the reference period (by 55% in case of OTB_DEF and as much as by 74% in case of LLS_DEF), which resulted in significant reduction of number of trips available for sampling.

The métier OTB_DEF in SD 22-24 and in SD 25-32 was sampled in 4 and 20 trips respectively, as compared to 15 and 20 trips planned to be sampled in SD 22-24 and SD 25-26 respectively (trips at sea and landings on shore combined).

For GNS_DEF métier, total of 20 trips for both SD 22-24 and SD 25-32 were planned for sampling. Only 12 trips for this métier were actually sampled in SD 22-24, whereas 21 trips were sampled in SD 25-32. The discrepancy between the expected and achieved number of sampled trips with the use of GNS_DEF targeting *Platichthys flesus* in SD 22-24 was the result of the decreased fishing activity (the total catch of *Platichthys flesus* in that SD was smaller by 30% as compared to previous year).

For LLS_DEF métier, five trips in SD 22-24 and 10 trips in SD 25-32 were planned to be sampled on shore. No trips were sampled in SD 22-24 due to very low catch of both *Gadus morhua* and flatfishes. In SD 25-32, nine trips were sampled. The shortfall again was due to low level of quota utilization (51% only in case of *Gadus morhua* quota) and decreased fishing activity with the use of this métier (total number of trips with the use of LLS_DEF métier in 2014 was lower by 73% in SD 22-24 and by 69% in SD 25-32 as compared to the reference years).

For the **pelagic métier** OTM_SPF_32-104 used in fishery targeting *Clupea harengus* in SD 22-24 only one trip were sampled at sea and no trips were sampled on shore, as compared to planned sampling of three trips on shore and three trips at sea. Main reason for that shortfall was the fact that there were very limited number of vessels fishing with this métier operating in that area and it was difficult both to place the observers on board the vessels (due to safety reason) and to coordinate availability of observers at the time and place of landings.

For OTM_SPF_32-104 métier, targeting *Clupea harengus* in SD 25-32, total of 21 trips were sampled (15 trips on shore and 6 trip at sea), as compared to 18 trips planned (12 trips on shore and 6 trips at sea respectively). Three more than planned trips were sampled on shore in order to compensate the shortfall observed for sampling this métier in SD 22-24.

Although total of 6 trips were planned to sample the merged OTB/PTB_SPF_32-104 métier targeting *Clupea harengus* in SD 25-32 (two at sea and four on shore trips), no trip were sampled in 2014 due to significant decline in the use of these gears in the *Clupea harengus* fishery. Despite the attempts made to arrange sampling of this métier, none of the vessels' owners contacted on that declared the intention to use one of these fishing gear – usually vessels' operators start fishing with pelagic trawl (OTM_SPF) and occasionally change the gear to OTB_SPF in the course of the fishing trip, which makes the sampling of this métier very difficult or impossible.

For FPO_SPF_>0_0_0 métier, all three planned trips were sampled on shore in SD 22-24. Out of six trips planned for sampling on shore in SD 25-32, only three trips were actually sampled. This shortfall was mainly caused by the decline of this type of fishery in SD 25-32 in the sampling year (reduction by over 64% in number of trips compared to the reference years). In order to compensate for this shortfall, two at sea trips with the use of this métier were sampled.

For GNS_SPF_32-109 métier in SDs 22-24 all three planned trips were sampled. Out of 6 trips planned for sampling on shore in SD 25-32, four trips were actually sampled and additionally, to compensate for this shortfall, one trip were sampled at sea.

For OTM_SPF_16-31_0_0 métier for *Sprattus sprattus* targeting fishery in the ICES SD 22-24 all six planned trips were sampled on shore. In SD 25-32, 16 trips at sea and 13 trips on shore were sampled, as compared to 14 trips planned for sampling at sea and 14 trips planned for sampling on shore, respectively. Two more than planned trips were sampled at sea as a result of increased activity in *Sprattus sprattus* fishery (by 25% as compared to previous sampling year).

III.C.2 Data quality: results and deviation from the NP

There were no deviations from the sampling methods used for collecting data. In some cases, there were deviations in sampling intensity for particular metier (as described in section III.C. 1 above) but those deviations were the result of a changed fishing pattern in the sampling year, thus reflected the actual performance of the fishery.

III.C.3 Follow-up of Regional and international recommendations

There were no relevant RCM/Liaison Meeting/STECF recommendations.

III.C.4 Actions to avoid shortfalls

Shortfalls described in sections III.C.1 were unavoidable do to the changes in the fishing pattern in 2014 as compared to previous years. Sampling scheme needs to be adjusted according to fishing spatial and temporal distribution and, therefore, more direct contacts and dialogue with fishing industry is required.

III.C North Sea and Eastern Arctic

III.C.1 Achievements: results and deviation from NP proposal

Only one trip for one metier were planned to sample by Poland in ICES area I, II in 2014 sampling year – i.e., DEF_>120_0_0 targeting *Gadus morhua* , and this target was met.

In case of *Gadus morhua* fished by Polish vessel in the Eastern Arctic with the use of that metier, in total, 12781 individual fish from area IIb and 596 individual fish from area I were measured for length,

III.C.2 Data quality: results and deviation from NP proposal

There were no deviations from the NP.

III.C.3 Follow-up of Regional and international recommendations

There were no relevant RCM/Liaison Meeting/STECF recommendations.

III.C.4 Actions to avoid shortfalls

No action required.

III.C Other regions

III.C.1 Achievements: results and deviation from NP proposal

CECAF

Sampling in 2014 was arranged through agreed joint sampling programme.
Following RCM LDF 2011 recommendation, Poland signed to "*Multi-lateral agreement between Germany, Latvia, Lithuania, The Netherlands and Poland for biological data collection of pelagic fisheries in CECAF waters"*. The original agreement, signed in 2011, provided for joint sampling programme over two years period, ending 31 December 2013. In 2014 an amendment to that agreement was signed extending it for another two years period, ending 31 December 2015 – attached in Annex I.
The above joint sampling programme is coordinated by the Netherlands. Sampling activities and achievements are to be described in the Netherlands' Annual Report 2014.

Apart from the sampling planned within the NP 2014, and on top of the joint sampling programme under the DCF mentioned above, on the basis of a contract with fishing operator, NMFRI placed observers on the Polish vessel engaged in the small pelagic fishery in the Mauritanian waters in CECAF region in April 2014. In total, 8130 fish were measured for length and 588 fish were sampled for age and these biological data were uploaded to the database. All cost of this observer trip was covered by the vessel's owner.

SPRMFO

There were no fishing activities in the SPRMFO area by Polish vessels in 2014.

III.C.2 Data quality: results and deviation from NP proposal

CECAF

Sampling in 2014 was arranged through agreed joint sampling programme, coordinated by the Netherlands. Sampling activities and achievements are to be described in the Netherlands' Annual Report 2014.

SPRMFO

There were no fishing activities in the SPRMFO area by Polish vessels in 2014.

III.C.3 Follow-up of Regional and international recommendations

The RCM LDF 2013 recommendations related to sampling in CECAF and SPRMFO waters and the responsive action taken are listed in the standard table II.B.2.

III.C.4 Actions to avoid shortfalls

No action required.

III.D Recreational fisheries

III.D Baltic Sea

III.D.1 Achievements: results and deviation from NP proposal

According to Polish NP for 2014 only *Gadus morhua* recreational fishery were sampled in the Baltic Sea.

Sampling of 11 out of 12 trips planned in 2014 were performed according to the method described above. The reason that not all planned trips were executed (short of one trip) were either bad weather conditions preventing angling trips or lack of space on board the vessel at the time the observers were available.

III.D.2 Data quality: results and deviation from NP proposal

The recreational fishery for cod (*Gadus morhua)* in Poland is monitored using effort information (number of angling trips in sampling frames - ICES Subdivision and quarter) provided by Harbour Master Offices and mean weight of cod calculated from on-board observed trips. Raising sample mean weight of the anglers catch from observed trips in a given stratum by the known number of trips at the population level, the total recreational catch of *Gadus morhua* is obtained.

Two types of data were collected in order to monitor the development of *Gadus morhua* recreational fisheries and to estimate the catch level.

1. Data on the number of recreational sea-going trips and the number of anglers participating at those trips were collected from Harbour Master Offices' registers.

2. Data on total weight of fish caught and biological data (length, weight, sex, maturity and age) were collected and processed from angling trips with observers on-board.

Data on number of recreational sea-going trips and the number of anglers participating at those trips collected from Harbour Master Offices' registers are the complete data source on marine recreational fisheries status. Each angling vessel's departure, including number of anglers on-board, is recorded in Harbour Master Offices' documents. Main purpose of on-board observed trips was to measure the length and weight of each fish caught in order to determine the whole catch of fish during given trip (part of the catch was also sampled for other biological data - sex and age). This allows for estimating the total catch applying raising method by number of trips recorded by Harbour Master Offices.

Vessels for on-board observer trips are selected randomly. However, this is possible only for vessels above certain size having enough space to take more than 8-10 anglers. In this context, the WGRFS, in its 2014 report, noted that vessel selection is not fully random and small boats (of the length of a few meters) are not covered by on-board sampling creating potential bias of the total catch estimate and biological information collected. It also noted that sampling does not cover cod angling from the beaches, however land-based fishing methods contribute only little to the total catch. WGRFS concluded that, overall, these data are of good quality, but may be biased and are likely to represent an underestimate of the total recreational catch.

III.D.3 Follow-up of Regional and international recommendations

There were no relevant RCM/Liaison Meeting/STECF recommendations.

III.D.4 Actions to avoid shortfalls

In order to minimize the potential bias regarding data quality (section III.D.2 above), it is planned to extend the monitoring of the *Gadus morhua* recreational fisheries by implementing the questionnaires survey.

III.E Stock-related variables

The planned and achieved sampling is summarized in Table III.E.3.

III.E Baltic Sea

III.E.1 Achievements: results and deviation from NP proposal

According to NP, Poland should sample 13 stocks in the Baltic Sea.

Clupea harengus SD22-24, SD 25-32: There were shortfall in number of fish measured for age for both stocks of Clupea harengus – by 47% in case of SD22-24 stock and by 23% in case of SD 25-32 stock. The intention was to collect sufficient number of samples for detailed biological analyses from both trips sampled on shore and trips sampled at sea, but it was not achieved due to reduced number of trips sampled in 2014 for reasons explained in section III C 1 (Baltic).

Sprattus sprattus SD22-32: Baltic sprat was sampled slightly in excess of the planned level (excess of 924 specimens, *i.e.* by 27%), mainly due to the fact that on top of age sampling from commercial fishery, over 1300 sprat individuals were sampled for age/weight during the surveys.

Gadus morhua SD22-24, SD25-32: Baltic cod stock SD22-24 was undersampled by 50% in terms of number of fish measured for length, weight, sex, age and maturity. The main reason for the shortfall were low level of the cod TAC quota utilization in 2014 in SD 22-24 and overall dramatic decrease in cod fishery (by 40-60% as compared to the reference years) which resulted in limited number of trips available for sampling. On the other hand, cod stock SD25-32 was oversampled, which was mainly caused by an intensive sampling at sea (including over 1100 cod individuals sampled during the surveys) and did not resulted in additional cost which would lead to budget excess. Additionally, a high sampling level for this cod stock (being the main cod stock for the Polish fishery) was caused by the need to achieve high number of weight@length ratio for individuals in order to get the reliable weight-length relationship, which is the issue of growing concern in the light of the assumed decrease in individual growth rate for Baltic cod. Thus numerous and reliable data are required to investigate this issue.

Platichthys flesus SD22-32: Flounder was sampled slightly in excess of the planned level (by 34%), due to the fact that on top of age sampling from commercial fishery, over 1300 individuals were sampled for age/weight during the surveys.

Pleuronectes platessa SD22-32: Plaice was sampled in excess of the planned level, due to unexpectedly high abundance of plaice caught in the control hauls during the BITS-1Q and BITS-4Q surveys (in total 533 specimens).

Psetta maxima SD22-32: Turbot was also sampled in excess of the planned level (excess of 86 specimens, *i.e.*by 86%).

Salmo salar SD22-31: Salmon was sampled in excess of the planned level (by 47%) due to its abundance in observed trips, from which all fish caught were taken for biological analysis.

Salmo trutta SD22-32: There was a slight shortfall in sampling Sea trout (by 15%) due to the fact that it was not possible to obtain sufficient number of fish, both from self-sampling or from the market, to achieve the target.

Perca fluviatilis IIId: There were a slight shortfalls in the sampling biological variables for perch (by 15%, but with acceptable limits.

Sander lucioperca IIId: There were no significant shortfalls in the sampling biological variables for pike perch. This species was under-sampled only by 3%, thus within an acceptable limits.

Anguilla anguilla IIIb-d: There were slight excess in sampling biological variables for European eel. This species was over-sampled only by 11%, thus within an acceptable limits.

III.E.2 Data quality: results and deviation from NP proposal

There were no deviations from the sampling methods used for collecting data. In some cases, there were deviations in sampling intensity for particular stock related variables, reason of which is described in section III.E. 1 above.

III.E.3 Follow-up of Regional and international recommendations

There were no relevant RCM/Liaison Meeting/STECF recommendations.

In 2014 an Amendment to the bilateral agreement with Sweden on the collection of biological data from *Sprattus sprattus* fishery was signed, reflecting internal change to the responsibility for Data Collection in Sweden and setting the date of 31st December 2016 as the end date of the agreement (Annex II).

III.E.4 Actions to avoid shortfalls

Shortfalls described in sections III.E.1 were unavoidable due to the changes in the fishing pattern in 2014 as compared to previous years. Sampling scheme needs to be adjusted according to fishing spatial and temporal distribution and therefore more direct contacts and dialogue with fishing industry is planned.

III.E North Sea and Eastern Arctic

III.E.1 Achievements: results and deviation from NP proposal

According to NP 2014 Poland should sample one stock in the region of North Sea and Eastern Arctic, *Gadus morhua* I-II. There were no shortfalls in the sampling biological variables for this cod stock.

III.E.2 Data quality: results and deviation from NP proposal

There were no deviations from the NP.

III.E.3 Follow-up of Regional and international recommendations

There were no relevant RCM/Liaison Meeting/STECF recommendations.

III.E.4 Actions to avoid shortfalls

No action required.

III.E Other regions

III.E.1 Achievements: results and deviation from NP proposal

CECAF

Sampling in 2014 was arranged through agreed joint sampling programme.
Following RCM LDF 2011 recommendation, Poland signed to "*Multi-lateral agreement between Germany, Latvia, Lithuania, The Netherlands and Poland for biological data collection of pelagic fisheries in CECAF waters"*. The original agreement, signed in 2011, provided for joint sampling programme over two years period, ending 31 December 2013. In 2014 an amendment to that agreement was signed extending it for another two years period, ending 31 December 2015 – attached in Annex I.
The above joint sampling programme is coordinated by the Netherlands. Sampling activities and achievements are to be described in the Netherlands' Annual Report 2014.

Apart from the sampling planned within the NP 2014, and on top of the joint sampling programme under the DCF mentioned above, on the basis of a contract with fishing operator, NMFRI placed observers on the Polish vessel engaged in the small pelagic fishery in the Mauritanian waters in CECAF region in April 2014. In total, 8130 fish were measured for length (including 1950 of *Trachurus trachurus* and 1149 of *Scomber japonicus*). Over thousand of fish were sampled for age (including 274 of *Trachurus trachurus* and 314 of *Scomber japonicus*) and these biological data were uploaded to the database. All cost of this observer trip was covered by the vessel's owner.

SPRMFO

There were no fishing activities in the SPRMFO area by Polish vessels in 2014.

III.E.2 Data quality: results and deviation from NP proposal

CECAF

Sampling in 2014 was arranged through agreed joint sampling programme, coordinated by the Netherlands. Sampling activities and achievements are to be described in the Netherlands' Annual Report 2014.

SPRMFO

There were no fishing activities in the SPRMFO area by Polish vessels in 2014.

III.E.3 Follow-up of Regional and international recommendations

The RCM LDF 2013 recommendations related to sampling in CECAF and SPRMFO waters and the responsive action taken are listed in the standard table II.B.2.

III.E.4 Actions to avoid shortfalls

No action required.

III.F Transversal variables

III.F.1 Capacity

III.F.1.1 Achievements: results and deviation from NP proposal

Data originated from the national register of fishing vessels. Assigning a given vessel to a segment of the fleet was based on information derived from fishing logbooks or monthly reports (vessels below 8 m LOA). The data were collected from all active vessels (those which performed catches on at least one day per year) as well as from inactive vessels (those which do not conduct catches, but were registered as of 2013 January 1st).

III.F.1.2 Data quality: results and deviation from NP proposal

The data were collected for the entire population; there is no need for data sampling.

III.F.1.3 Actions to avoid shortfalls

Not applicable

III.F.2 Effort

III.F.2.1 Achievements: results and deviation from NP proposal

Effort data were collected using vessel register, logbooks or monthly catch declarations in case of vessels less than 8 meter length.

III.F.2.2 Data quality: results and deviation from NP proposal

All effort data are based on census information.

III.F.2.3 Follow-up of Regional and international recommendations

No such recommendations

III.F.2.4 Actions to avoid shortfalls

Not applicable

III.F.3 Landings

III.F.3.1 Achievements: Results and deviation from NP proposal

Information were gathered from entire population. As mentioned earlier due to confidentiality reasons some of the transversal variables, i.e. value of landings and prices by commercial species, were

collected but could not be reported for “Other regions” and North Atlantic where small number of vessels (2+1 units) operated. Data about landing value for smaller vessels (less than 8 meters) were estimated based on price information available from other vessels. Volume of landings of the vessels was taken from monthly catch reports submitted to FMC (census data).

III.F.3.2 Data quality: Results and deviation from NP proposal

Data for value of landings were produced for entire population (100%) using sales notes information. If value was missing for some vessels belonging to different segments it was estimated on the basis of average prices of similar group of vessels taking into account seasonal price variability.

III.F.3.3 Follow-up of Regional and international recommendations

There were no relevant RCM/Liaison Meeting/STECF recommendations.

III.F.3.4 Actions to avoid shortfalls

Not needed.

III.G Research surveys at sea

The National Marine Fisheries Research Institute in Gdynia conducted three research surveys in 2014, which have the priority 1. The following surveys were executed on board of the r/v “Baltica” within the Polish EEZ:

- the bottom-trawl survey (BITS-1Q), conducted in the period of 10.02-26.02.2014, within the framework of the Baltic International Trawl Surveys long-term programme,
- the acoustic and pelagic-trawl survey (BIAS), conducted in the period of 17.09-04.10.2014, within the framework of the Baltic International Acoustic Surveys long-term programme,
- the bottom-trawl survey (BITS-4Q), conducted in the period of 16.11-28.11.2014, within the framework of the Baltic International Trawl Surveys long-term programme.

The principal methods of investigations, timing of the BITS and BIAS surveys and the scheme of randomly selected control-hauls spatial distribution in the bottom zone of the southern Baltic were designed and co-ordinated by the ICES Baltic International Fish Survey Working Group [WGBIFS].

III.G.1 Achievements: results and deviation from NP proposal

• **BITS-1Q/2014 survey**: overall, 16 days at sea were used for fulfilling the survey purposes (and 16 days were originally planned). According to the survey schedule, 51 bottom trawl catch-stations were planned at location randomly selected by WGBIFS. The r.v. "Baltica" performed in total 53 bottom trawl catch-stations (Fig. 1) - two more than planned, because at one occasion one control haul was only initiated with hydrological measurements and abandoned due to oxygen deficit in the near bottom layer (0.83 ml/l, which was well below the required minimum of 1.5 ml/l) and at another occasion a control haul was disqualified due the trawl damage and had to be repeated.

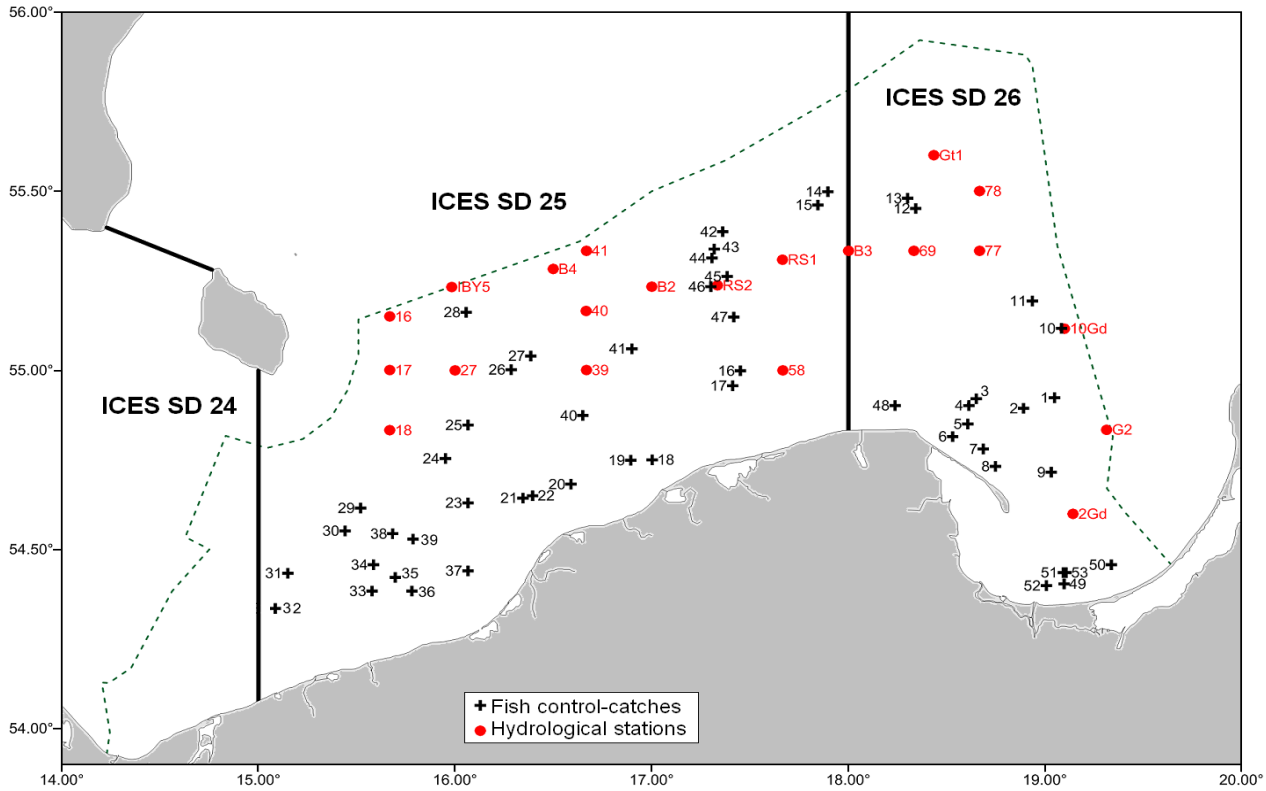


***Figure 1**. Location of the bottom trawl hauls (Nos. 1-53) and the hydrological standard stations, inspected by the r.v. "Baltica" during the BITS-1Q/2014 survey in the Polish part of the southern Baltic (green dashed line).*

Trawling was done with the standard bottom trawl type TV-3#930, with 10-mm mesh bar length in the codend. Control hauls were conducted at the daylight, for 30 minutes each, except for three hauls for which the towing was shortened to 15 minutes, mostly because of unfavourable bottom conditions (rocky bottom or changeable bottom depth). In order to determine species composition and evaluate the CPUE of single species, catch from each control-haul was sorted, fish were weighed and the samples of dominants were taken to determine the length distribution, age-length-mass relationships, sex, stage of gonads development, feeding conditions, the numerical share of young, undersized specimens in samples, and prevalence of externally visible diseases. The total length distribution and the mean mass at the 0.5-cm classes - in the case of clupeids and 1-cm classes in the case of other species were determined. Following number of fish of main species were taken for the length and mass determination:

- *Gadus morhua* – 11989,
- *Clupea harengus* – 5926,
- *Sprattus sprattus* – 5045,
- *Platichthys flesus* – 3645,
- *Pleuronectes platessa* – 439.

In total, 27655 individual fish, representing 18 species were taken for the length and mass determination. During the length measurements fish were visually inspected for determination the symptoms of different pathological changes, visible on the skin surface and in the vertebral column.

Overall, 3117 individual fish, including, 551 of *Gadus morhua* , 740 of *Clupea harengus* , 465 of *Sprattus sprattus* , 845 of *Platichthys flesus*, 337 of *Pleuronectes platessa* and 179 individuals of other fish species were taken to the standard biological analyses, including ageing. Biological analyses of fish were made in accordance to the standard methodological procedures recommended by the ICES-WGBIFS, directly on board of the research vessel.

Every control-haul was preceded by the basic hydrological parameters measurements (the seawater temperature, salinity, oxygen content), made continuously from the sea-surface to the bottom. The hydrological data were aggregated and archived per each 1-m depth interval. Overall, 53 catch-stations starting positions and 21 standard hydrographic stations at the main hydrological research profile of the southern Baltic were controlled by the Neil-Brown CTD-probe combined with the rosette sampler (the bathometer rosette). Oxygen content was determined by the standard Winkler's method. Meteorological observations of air temperature, wind speed and direction and atmospheric pressure were performed at actual geographical position of each research station, with applied automated station type MILOS-500.

• **<u>BITS-4Q/2014 survey</u>**: overall, 12 working days at sea were used to fulfil the survey goals (as originally planned). Overall, all 33 originally planned catch-stations were accomplished, 22 and 11 in SDs 25 and 26 respectively, at location randomly selected by WGBIFS (Fig. 2).

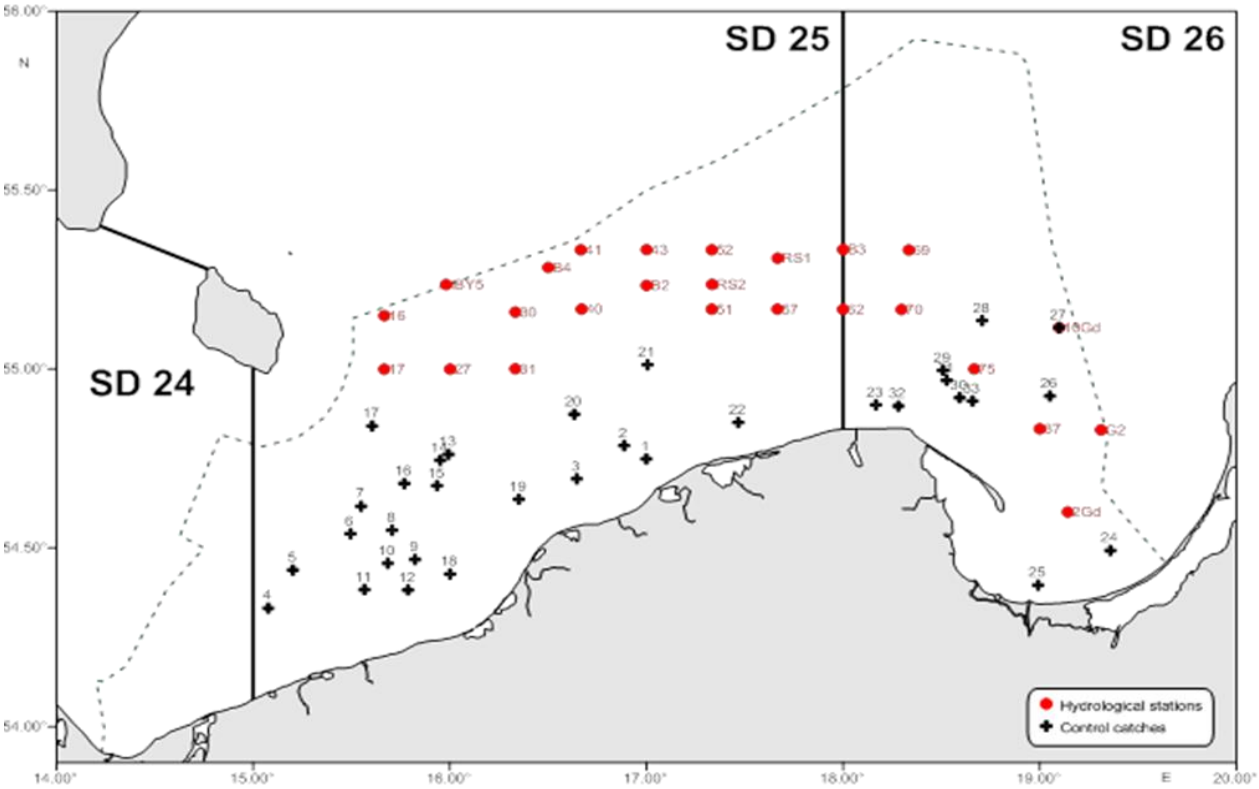


***Figure 2**. Location of the bottom trawl hauls (Nos. 1-33) and the hydrological standard stations, inspected by the r.v. "Baltica" during the BITS-4Q/2014 survey in the Polish part of the southern Baltic (dashed line).*

Trawling was done with the standard bottom trawl type TV-3#930, with 10-mm mesh bar length in the codend. Control hauls were conducted at the daylight, for 30 minutes each.

The catch per unit effort (CPUE) of each species was calculated. The catch from each control haul was sorted out, fishes were weighed and the samples or sub-samples were taken to determine he length distribution, age-length-mass relationships, sex, stage of gonads development, feeding conditions. In the case of plaice and turbot and in the most hauls regarding *Gadus morhua* and *Platichthys flesus*, every specimen caught was taken to the total length and mass measurements. In the case of clupeids, the subsamples were taken. The total length distribution and the mean mass at the 0.5-cm classes - in the case of clupeids and 1-cm classes in the case of other species were determined. Following number of fish on the main commercial species were taken for the length and mass determination:

- *Gadus morhua* – 6130,
- *Clupea harengus* – 3551,
- *Sprattus sprattus* – 2490,
- *Platichthys flesus* – 1115,
- *Pleuronectes platessa* – 297.

Overall, 14245 individual fish, representing 18 species, were taken for the length and mass determination. All fish taken for the length measurements were also visually inspected for determination of externally symptoms of diseases, visible on the skin surface and in the vertebral column (various pathological changes).

Overall, 2133 individual fish, including 388 of *Gadus morhua* , 272 of *Sprattus sprattus* , 549 of *Clupea harengus* , 502 of *Platichthys flesus*, 196 *Pleuronectes platessa* and 5 of *Psetta maxima* individuals were taken to the standard biological analyses performed according to the ICES-WGBIFS standard methodological procedures, directly on board of the research vessel. Materials collected during fish length measurements were used for an evaluation of the juvenile, undersized specimens' numerical share in samples.

Every control-haul was preceded by the basic hydrological parameters (the seawater temperature, salinity, oxygen content) measurements, made continuously from the sea-surface to the bottom. The hydrological data were aggregated and archived per each 1-m depth interval. Overall, 49 measurements at hydrological stations were made in the survey area, including 58 stations at the starting position of control hauls and 25 additional standard hydrographic stations along the research profile of the southern Baltic. The Neil-Brown CTD-probe combined with the rosette sampler (the bathometer rosette) was applied for these measurements. Oxygen content was determined by the standard Winkler's method. Meteorological observations of air temperature, wind speed and direction and atmospheric pressure were performed at actual geographical position of each research station, with applied automated station type MILOS-500.

• **BIAS/2014 survey**: in total, 18 working days were used to fulfil the survey goals (and 18 days were planned), and 33 out of 34 planned fish catch-stations with the use of herring small-meshed pelagic trawl type WP 53/64x4 with 6 mm mesh bar length in the codend were performed. (Fig.3). Depth to the bottom at trawling positions varied from 27 to 102 m. Standard towing time was 30 minutes.

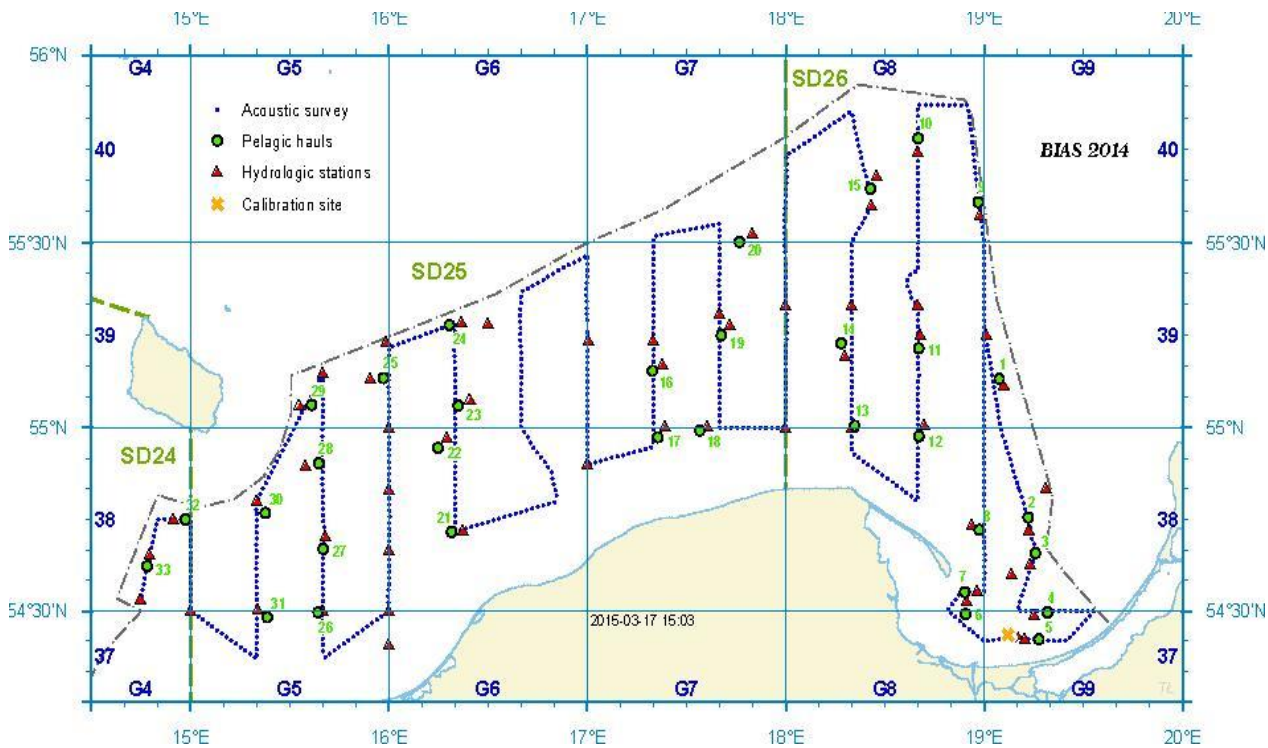


***Figure 3**. Location of the echointegration track, pelagic control hauls, hydrologic stations and the calibration site during the autumn BIAS 2014 survey in the Polish Exclusive Economic Zone on board r/v Baltica.*

Fishes caught in each control-haul were sorted by species and weighed. The total length distribution and the mean mass at the 0.5-cm classes - in the case of clupeids and 1-cm classes in the case of Gadus morhua and the by-catch were determined. Following number of fish of main species were taken for the length and mass determination:

- *Gadus morhua* – 274,
- *Clupea harengus* – 5234,
- *Sprattus sprattus* – 4268.

Overall, 1931 individual fish, including 208 of *Gadus morhua* , 582 of *Sprattus sprattus* and 1129 of *Clupea harengus* were taken to the standard biological analyses performed according to the ICES-WGBIFS standard methodological procedures, directly on board of the research vessel.

The acoustic system calibration was performed on 18.09.2014, at the geographical position: φ = 54°26.07'N, λ = 019°07.48'E. The SIMRAD EK-60, split-beam scientific echosounder, linked with the transducers type ES38-B and ES120-7C, with the transceivers working at frequencies of 38 and 120 kHz was used. The new applied values of acoustic parameter *Sv* (transducer gain) for the transducers type ES38-B and ES120-7C were 24.24 dB and 25.54 dB respectively. For comparison, calibration results (*Sv*) from previous year (19.09.2013) were 23.93 and 26.09 dB respectively.

One of the principal survey task was to collect echo-integration records (S_A = NASCs; Nautical Area Scattering (Strength) Coefficient) along the pre-selected acoustic transects on the distance of about 830 NM.

The distance covered in Sep.-Oct. 2014 with echosounding was 926 NM (EDSU - Elementary Distance Sampling Unit), of which 830 NM along the pre-selected acoustic transects and 96 NM during control hauls. In the final calculation of fish stocks biomass the above mentioned value of EDSU was accepted as fully valid and the area of 13014 NM^2 were covered with echosounding. The values of the S_A parameter for each ESDU were the input data for fish stocks biomass estimation. The echo-integration data, which originated mostly from the layers of 10-m depth interval, were collected in a daytime. Because of a vessel hull reverberations and aeration zone, an echo-integration started at 10-m depth from a sea surface. The mean target strength (TS) – one of the principal acoustic parameter – was calculated according to following formulas:

· clupeids TS = 20 log L - 71.2 (Anon. 1983),
· gadoids TS = 20 log L - 67.5 (Foote et al. 1986).

The total number of fish in each the ICES rectangle was estimated as a product of the mean NASCs from scrutinized acoustic data and a rectangle area, divided by corresponded the mean acoustic cross-section. Clupeids abundance was separated into *Sprattus sprattus* and *Clupea harengus* according to the mean share in control-catches in given the ICES rectangle.

The seawater temperature and salinity were measured continuously from the sea surface to a bottom, and oxygen content every 10 m, directly after each of 33 control hauls. The hydrological parameters were measured also at 23 hydrographical stations located within the Polish marine waters. In total, 56 hydrological stations were inspected with the Idronaut or Neil-Brown CTD-probe combined with the rosette sampler (the bathometer rosette). Oxygen content was determined by the standard Winkler's method. The basic meteorological parameters, i.e. air temperature and pressure, wind direction and force, state of sea were registered at the each catch-station location with the use of automated station type MILOS-500.

III.G.2 Data quality: results and deviation from NP proposal

There were no deviations from the NP.

The BITS and BIAS surveys data collected by the NMFRI in 2014 are stored in a local database and were regularly submitted to the internationally co-ordinated databases (TowDatabase, BIAS_DB, ROSCOP, DATRAS). The surveys data were submitted to the ICES Baltic International Fish Surveys Working Group (WGBIFS) for the analysis and compiled data were provided to the Baltic Fisheries Assessment Working Group (WGBFAS) for the assessment of the Baltic fish stocks (*Gadus morhua* , *Platichthys flesus, Clupea harengus, Sprattus sprattus*). The surveys data were successfully uploaded to ICES databases and have been checked positively.

III.G.3 Follow-up of Regional and international recommendations

There were no specific recommendations applicable to the research surveys at sea

III.G.4 Actions to avoid shortfalls

No shortfalls requiring actions were experienced.

IV Module of the evaluation of the economic situation of the aquaculture and processing industry

IV.A Collection of data concerning the aquaculture

In 2013 the total volume of aquaculture production for consumption was 31.3 thousand tons, comprised of 16.8 thousand tons of Common carp (*Cyprinus carpio*), 11.4 thousand tons of Rainbow trout (*Oncorhynchus mykiss*), and 3.1 thousand tons of other species. Carp farms are located all over the country but larger facilities are located in central and southern Poland where climatic conditions are warmer and thus more advantageous. Rainbow trout farms are located in the north on the Baltic Sea coast and in southern Poland in the Carpathian foothills in rich terrain with clear, cool waters. Most of aquaculture farms produce more than one species, mainly Grass carp (*Ctenopharyngodon idella)*, Silver carp (*Hypophthalmichthys molitrix)*, Bighead carp (*Hypophthalmichthys nobilis)*, Pike (*Esox Lucius)*, European catfish (*Silurus glanis*), Tench (*Tinca tinca)* and Sturgeons (*Acipenseridae*). In addition to the production of fish for consumption, Polish aquaculture produced 3.5 thousand tons of stocking material for migratory (anadromous), reophile and predatory fish. This material was used to stock open waters, exploited by the Polish Angling Association and other leaseholders, the Baltic Sea and rivers.

In 2013 there were about 840 aquaculture land-based farms. Within the framework of DCF Poland did not collect economic data for freshwater species in accordance with the provisions of Chapter IV, Part A, point of 2.2. Commission decision of 18 December 2009 (2010/93/EU).

The target population for collecting economic data was only fish farms that produced Atlantic salmon (*Salmo salar)* stocking material for restocking Polish Marine Areas and cooperate with the Panel for Restocking appointed by the Minister of Agriculture and Rural Development.

IV.A.1 Achievements: results and deviation from NP proposal

A sector has been identified for DCF's purpose which consists of fish farms that breed and rear *Salmo salar* fry and that cooperate with the Panel for Restocking appointed by the Minister of Agriculture and Rural Development to stocking Polish Marine Areas. In 2013 this sector counted four farms.

All economic variables concerning the aquaculture as set out in Appendix X of Commission Decision of 18 December 2009 (2010/93/EU) were collected through questionnaire "RRW-A questionnaire on economic performance of aquaculture sector" addressed to all farmers from this sector (A – Census data collection scheme). It was assumed to collect questionnaires from all farms that breed and rear *Salmo salar* fry and that cooperate with the Panel for Restocking. Three of them responded to the survey and 75% response rate was achieved.

IV.A.2 Data quality: results and deviation from NP proposal

The data were collected for the entire population; there is no need for data sampling.

IV.A.3 Follow-up of Regional and international recommendations

There were no specific recommendations applicable to the collection of data concerning the aquaculture.

IV.A.4 Actions to avoid shortfalls

In order to increase the response rate more attention had been given to the collection of questionnaires with follow up calls and reminder letters.

IV.B Collection of data concerning the processing industry

IV.B.1 Achievements: results and deviation from NP proposal

The target population was 193 fish processing plants of NACE Code 10.20: ”Processing and preserving of fish, crustaceans and mollusks” authorized to sell their products on national and EU market, recorded in the Polish veterinary registry. It was assumed to collect questionnaires from all fish processing companies (there is a legal obligation for the companies to fill them according to the regulation of June 29, 1995 on public statistics (Journal of Laws. No. 88, pos. 439, with later amendments). A 85% response rate was achieved. However, since all major players were included, this gives information on almost entire fish processing production in Poland. All questionnaires were verified for consistency, and only information received from verified questionnaires was used to carry out the analysis of the economic results of fish processing.

Economic information was also collected from companies that carry out fish processing but not as a main activity.

IV.B.2 Data quality: results and deviation from NP proposal

The data were collected for the entire population; there is no need for data sampling. A 86% response rate was achieved for all segments.

IV.B.3 Follow-up of Regional and international recommendations

There were no specific recommendations applicable to the collection of data concerning the fish processing industry.

IV.B.4 Actions to avoid shortfalls

In order to increase the response rate more attention were given to the collection of questionnaires with follow up calls and reminder letters.

V Module of evaluation of the effects of the fishing sector on the marine ecosystem

V.1 Achievements: results and deviation from NP proposal

No deviations from NP were encountered. Fisheries independent research survey data were collected in 2014 during three surveys called BITS1q, BIAS and BITS4q. Data collected during surveys included data related to four DCF indicators describing the effects of fisheries on the marine ecosystem (conservation status of fish species, proportion of large fish, mean maximum length of fishes and size at maturation of exploited fish species).

VMS data and catch data were collected directly from the national Fishery Monitoring Centre (CMR). In order to combine these data with data collected under the DCF, the VMS and catch data were converted to relevant exchange formats *tacsat* and *eflalo* and uploaded to the Polish DCF database (NPZDRpl).

V.2 Actions to avoid shortfalls

No action required.

VI Module for management and use of the data

VI.1 Achievements: results and deviation from NP proposal

No deviations from NP were encountered. Requirements of data calls were met, including provision of data sets for ICES assessment working groups for Baltic and Atlantic stocks, the STECF Expert Working Groups and RCMs. Poland updated international databases like DATRAS, FishFrame, TowDatabase, ROSCOP, BIAS_DB (hydroacoustic database).

Poland delivered data in a spectrum that included: effort; quantities landed; quantities discarded; CPUE data; survey data; length composition of landings; age composition of landings; length composition of discards; age composition of discards; growth; sexual maturity; sex ratios; economic data for the fleets; economic data for the fish processing industry and aquaculture.

With regard to surveys, data from BITS surveys (1st and 4th quarter) include all fish species from control hauls in ICES SDs 25-26, whereas, data from BIAS survey were also collected in the Polish part of ICES SD 24. However, due to the lack of common database for hydroacoustic surveys, data from BIAS survey (September-October) were uploaded for *Sprattus sprattus*, *Clupea harengus* and *Gadus morhua* on aggregated level only - abundance and mean weights by those three species and by ICES rectangles, as well as an acoustic parameters – NASC and mean cross section. The database coupling with biological raw data from hydroacoustic surveys (length, weight and age for each control hauls) is still under development by the WGBIFS. Nevertheless, those raw data are available for analysis and stocks assessment.

With reference to the Liaison Meeting 2013 recommendation on quality assurance (listed in standard table II.B.2), upload of biological, economic and transversal data to the database on server located at NMFRI is done with the use of dedicated application based on Microsoft ASP.Net technology (Active Server Pages). As part of ensuring the security of data storage, an automatic backup procedure has been implemented, taking place every day. Access to applications and databases is possible only on the local network of the Institute. The application provides control access to the data through a system of user accounts and roles assigned to them. In order to increase the efficiency of the database it is planned to carry out the process of query optimization. In the development of interoperability it is planned to design a mechanism for the exchange of data in more formats than presently.

The current procedure for checking the quality and completeness of data provides for a two-step process of entering information. In the first stage, the data are entered and are marked with the status of forcing their verification. The second stage involves the approval of the data by an authorized user who has the ability to cross-check with administrative data. It is planned to implement a set of standard reports enabling current control of the quality and completeness of data.

VI.2 Actions to avoid shortfalls

With the recent development of Regional Data Base concept (like FishFrame), relevant arrangement were made related to national data base development in order to create appropriate protocols of transferring the data formats compatible with FishFrame formats.

VII Follow-up of STECF recommendations

There were no STECF Plenary recommendations addressed to MS relating to data collection in the 2013 STECF Plenary meetings.

VIII List of acronyms and abbreviations

Acronyms and abbreviations	Names
BIAS	Baltic International Acoustic Surveys
BIAS_DB	Baltic International Acoustic Surveys Data Base
BITS	Baltic International Trawl Surveys
CECAF	Committee for the Eastern Central Atlantic Fishery
DATRAS	DATabase of TRAwl Surveys
FishFrame	Fisheries & Stock Assessment Data Framework,
ICES	INTERNATIONAL COUNCIL FOR THE EXPLORATION OF THE SEA
LDF	Long Distant Fisheries
NMFRI	National Marine Fisheries Research Institute
NP	National Programme
RCM	Regional Co-ordination Meeting
ROSCOP	Report of Observations/Samples Collected by Oceanographic Programmes
SD	Sub-division
SPRFMO	South Pacific Regional Fishery Management Organization
TowDatabase	Database for trawl station
WGBFAS	Working group for international research surveys in Baltic
WGBIFS	Baltic International Fish Survey Working Group
WGRFS	Working Croup on Recreational Fisheries Surveys
VMS	Vessel Monitoring System
OTB,PTB,MTB,LLK,etc	Fishing gear

IX Comments, suggestions and reflections

None

X References

- Guidelines for the submission of Annual Reports on the National Data Collection Programmes under Council Regulation (EC) 199/2008, Commission Regulation (EC) 665/2008 and Commission Decision 2010/93/EU. Version 2 (26.02.2015).
- ICES. 2013. Report of the Baltic International Fish Survey Working Group (WGBIFS), 21-25 March 2013, Tartu, Estonia. ICES CM 2013/SSGESST:08. 505 pp.
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- ICES. 2014. Report of the Working Group on Recreational Fisheries Surveys (WGRFS), 2-6 June 2014, Sukarrieta, Spain. ICES CM 2014\ACOM:37. 662 pp.

XI Annexes

Annex I. Amendment to multi-lateral Agreement on sampling in CECAF waters

AMENDMENT TO:

Multi-lateral agreement between Germany, Latvia, Lithuania, The Netherlands and Poland for biological data collection of pelagic fisheries in CECAF waters

This Amendment replaces the initial amendment dated December 2013, to reflect the impact of the introduction of the EMFF in the co-financing options. The amendment is retrospectively accepted as per 1st January 2014.

The Multi-lateral agreement between Germany, Latvia, Lithuania, The Netherlands and Poland for biological data collection of pelagic fisheries in CECAF waters, as signed by all countries named in June 2011 (See annex) is amended as follows from 1st January 2014 onwards:

Term:

The multi-lateral agreement is extended beyond its initial end date of 31 December 2013. The new end date is 31 December 2015.

Costs:

The cost share for each country of the total costs follows a key based on the share in average landings in 2008-2012. Due to the move from direct to in-direct co-funding through national EMFF budgets, co-funding of the National expenses shall be covered through the National EMFF budget of each respective member. As of 2014, co-funding is no longer executed through the Dutch National Budget as it was in previous years.

Cost shares are maximum amounts, in case of lower costs, deductions might apply in line with the relative shares.

Total Landings 2008-2012 (RCM LDF Data) and cost shares by partners

Partner	2008	2009	2010	2011	2012	average 2008-2012	Landings share	Cost share per year
Netherlands	83,630	68,019	92,980	55,044	34,926	66,920	**22.95%**	€ 14,864
Germany	0	0	20,650	37,088	14,582	14,464	**4.96%**	€ 3,212
Poland	17,709	46,287	14,605	60,177	29,178	33,591	**11.52%**	€ 7,462
Lithuania	120,100	124,480	116,040	121,000	44,133	105,151	**36.06%**	€ 23,356
Latvia	68,410	81,283	87,237	89,667	30,723	71,464	**24.51%**	€ 15,874
TOTAL	*289,849*	*320,069*	*331,512*	*362,976*	*153,542*	*291,590*	*100.00%*	€ *64,768*

Signatures for agreement

Member State	Name	Function	Signature
Germany	Christoph Stransky	National Correspondent	C. Stransky Date: 2.12.2014
The Netherlands	Sieto Verver	Head Centre for Fisheries Research	Date: 1/12/2014
Latvia	Aivars Berzins	Director, Institute of Food Safety, Animal Health and Environment BIOR	Date: 15.12.14
Lithuania	Aidas Adomaitis	Deputy Director, Acting Director	Date: 8/12/2014
Poland	Ireneusz Wójcik	Head of Department of Logistics & Monitoring	Date: 8.12.2014

Annex II. Amendment to Bilateral Agreement with Sweden

Amendment to the

Bilateral Agreement between University of Agricultural Science (SLU), Institute of Marine Research Sweden and National Marine Fisheries Research Institute Poland for the collection of length and age samples in accordance with EC Regulation 665/2008, laying down detailed rules for the application of Council Regulation (EC) 199/2008, and its Commission Decision 2010/93/EU

The agreement between Sweden and Poland for biological data collection of sprat fisheries in the Baltic (Agreement), as signed on 1st of October 2011 is amended as follows:

Parties to the Agreement

Due to the internal change related to the responsibility for Data Collection in Sweden, the Agreement became the agreement between the **Swedish Agency for Marine and Water Management (SwAM)**, Sweden and the National Marine Fisheries Research Institute (NMFRI), Poland.

Term

Due to an extension of the current DCF for further years and the adoption of NP 2011-2013 for period 2014-2016, the Agreement remains in force until 31st December 2016 unless revoked before that date if required by the changes to the Council Regulation (EC) 199/2008.

Signatures:

For Sweden (SwAM)

Anna Hasslow

National Correspondent, Sweden

For Poland (NMFRI)

Ireneusz Wójcik

on behalf of National Correspondent, Poland

Date: 27 August 2014